

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by
U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
**COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO**

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
APR. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

%%

Released by

M. D. BURDICK

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

KENNETH L. WILLIAMS

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

DONALD F. HERVEY

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

%%

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor

and

RONALD E. MORELAND, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrieth, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

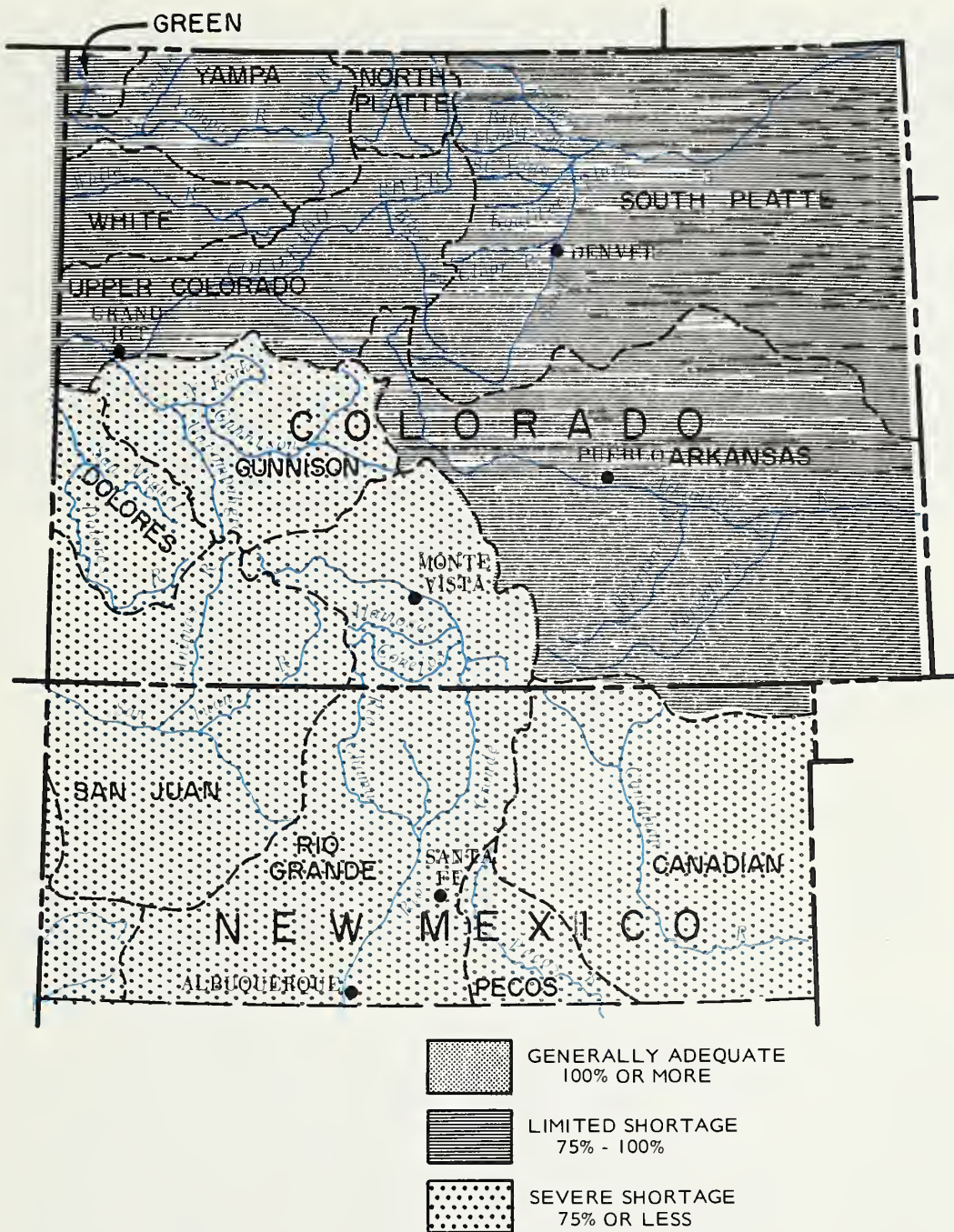
APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

April 1, 1972



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of
April 1, 1972

SNOWFALL WAS MUCH BELOW NORMAL FOR THE TWO STATE AREA FOR THE SECOND STRAIGHT MONTH. MANY SNOW COURSES ARE NEARING THE MINIMUM OF RECORD EXPECIALLY IN SOUTHERN COLORADO AND NEW MEXICO. STREAMFLOW FORECASTS WERE REDUCED ACCORDINGLY. SOME FORECASTS WERE REDUCED AS MUCH AS 30 PERCENT. RESERVOIR CARRY-OVER STORAGE IS GOOD IN THE NORTHERN HALF OF COLORADO AND NEAR NORMAL OVER THE REMAINDER OF THE TWO STATES. THIS WILL HELP AUGMENT THE EXPECTED LOW STREAMFLOW. SOIL MOISTURE IN THE MOUNTAINS HAS BEEN INCREASED DUE TO MELTING SNOW; HOWEVER, VALLEY SOILS REMAIN DRY.



COLORADO

-- THE NORTHERN THIRD OF COLORADO CAN STILL EXPECT NEAR NORMAL STREAMFLOW; HOWEVER, THESE FORECASTS HAVE BEEN LOWERED AS MUCH AS 20 PERCENT. FORECASTS ON THE SOUTH PLATTE

STREAMS VARY FROM 86 PERCENT OF NORMAL TO A HIGH OF 92 PERCENT. RESERVOIR STORAGE IS EXCELLENT. THE ARKANSAS SHOULD FLOW ABOUT 85 PERCENT AND HAS NEAR AVERAGE STORAGE. THE RIO GRANDE AND SAN JUAN BASINS WILL HAVE A SHORTAGE OF WATER UNLESS APRIL PRODUCES MUCH ABOVE NORMAL SNOW. THE COLORADO MAINSTEM AND YAMPA-WHITE RIVERS SHOULD PROVIDE ADEQUATE WATER IF APRIL SNOWFALL IS NORMAL.



NEW MEXICO

-- STREAMFLOW FORECASTS HAVE BEEN REDUCED AS MUCH AS 30 PERCENT REFLECTING THE MUCH BELOW AVERAGE SNOWFALL DURING FEBRUARY AND MARCH. TEMPERATURES HAVE BEEN UNSEASONABLY

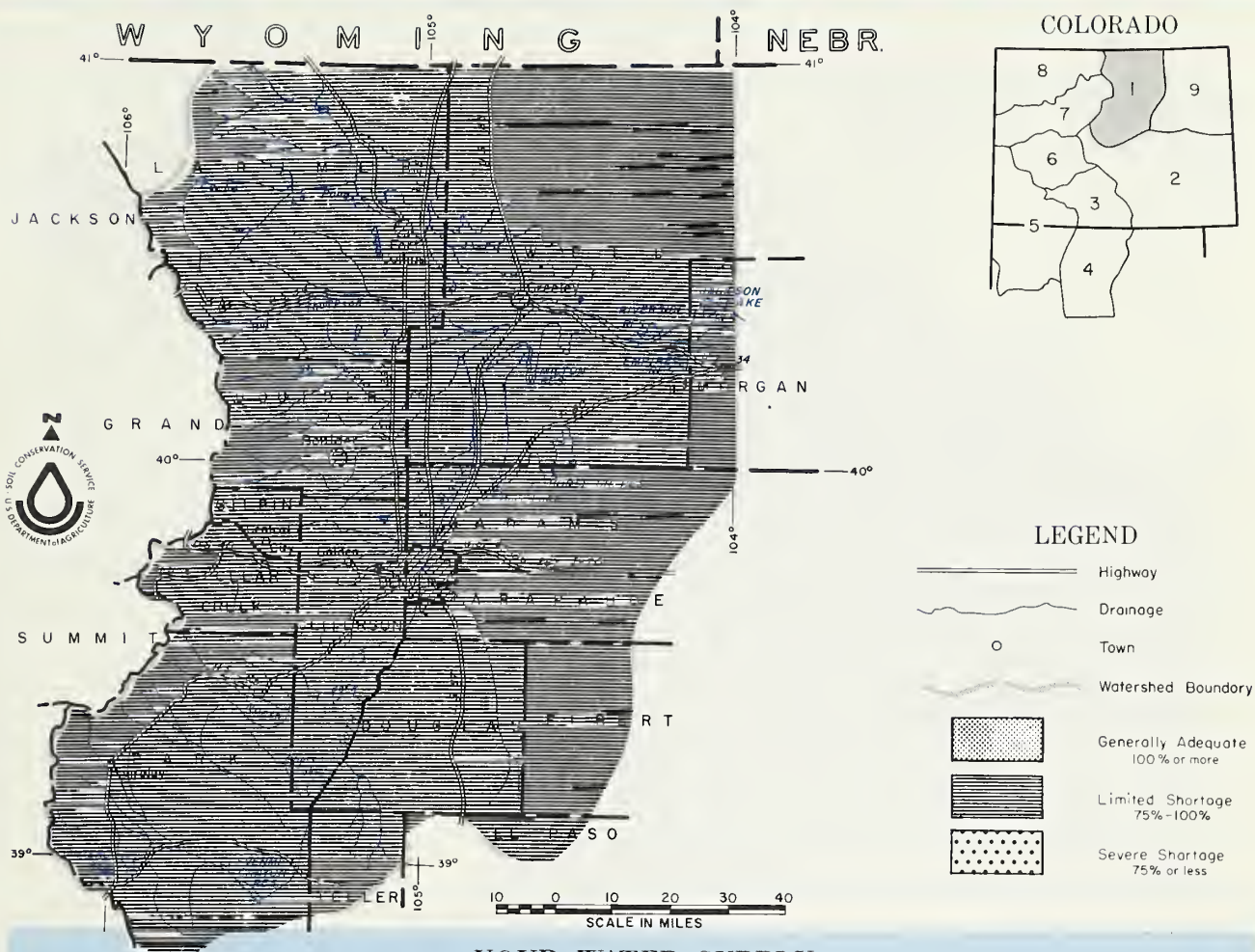
HIGH AND HAVE CAUSED CONSIDERABLE SNOW MELT. RIVERS HAVE STARTED TO RISE. CARRY-OVER STORAGE WAS DEPLETED LAST YEAR AND NOW STANDS AT 59 PERCENT. MOUNTAIN SOILS ARE WET REFLECTING THE MELTING SNOW. NAVAJO INFLOW FROM SAN JUAN RIVER WILL ALSO BE MUCH BELOW NORMAL.

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLY OUTLOOK WAS REDUCED SHARPLY THIS MONTH DUE TO ABOVE NORMAL TEMPERATURES AND LACK OF SNOWFALL. ALL STREAMS ON THE SOUTH PLATTE ARE EXPECTED TO FLOW LESS THAN NORMAL. CARRY-OVER RESERVOIR STORAGE IS EXCELLENT AND SHOULD PROVIDE ADEQUATE WATER SUPPLIES FOR MOST AREAS. SOIL MOISTURE IS DEFICIENT. ADDITIONAL SNOW AND/OR RAIN IS NEEDED IN VALLEYS AND MOUNTAINS DURING APRIL TO ASSURE A GOOD WATER SUPPLY THIS MONTH.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BUROCK---STATE CONSERVATIONIST
JACK L. HALL---AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

Apr-Sept

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average [†]
Big Thompson at Drake (1)	90	90	100
Boulder at Orodell	45	92	49
Cache La Poudre at Canyon Mouth (2)	195	91	215
Clear Creek at Golden (3)	105	88	119
St. Vrain at Lyons (4)	60	86	70

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Avg.	Avg.
Coal Creek	Avg.	Avg.
North Fork of South Platte	Avg.	Avg.
North Fork of Cache La Poudre	Avg.	Avg.
Ralston Creek	Avg.	Avg.
Rock Creek	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average [†]
Big Thompson	5	81	97
Boulder	3	96	97
Cache La Poudre	6	73	96
Clear Creek	6	78	86
Saint Vrain	3	89	92
South Platte	3	117	113

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average [†]
Big Thompson	-	- -	- -
Boulder	-	- -	- -
Cache La Poudre	-	- -	- -
Clear Creek	2	93	121
Saint Vrain	-	- -	- -
South Platte	2	114	130

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average [†]
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	28.0	26.2	21.1
Black Hollow	8.0	4.7	4.4	3.3
Boyd Lake	44.0	36.4	44.8	27.6
Cache La Poudre	9.5	8.0	8.0	7.5
Carter Lake	108.9	107.5	106.4	81.7
Chambers Lake	8.8	1.9	4.5	3.0
Cheesman	79.0	79.0	73.5	49.0
Cobb Lake	34.3	20.3	21.9	9.9
Eleven Mile	97.8	78.0	96.4	72.1
Fossil Creek	11.6	8.8	9.5	7.0
Gross	43.1	25.2	36.7	22.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average [†]
Halligan	6.4	6.4	3.3	4.7
Horsetooth	143.5	122.9	116.5	106.8
Lake Loveland	14.3	12.2	10.9	8.4
Lone Tree	9.2	7.8	8.7	6.6
Mariano	5.4	5.2	5.4	4.2
Marshall	10.3	6.0	7.0	3.0
Marston	18.0	15.5	16.3	14.7
Milton	24.4	17.8	15.9	10.8
Standley	42.0	30.3	31.0	11.0
Terry Lake	8.2	5.8	6.4	5.0
Union	12.7	12.1	12.7	7.6
Windsor	18.6	13.7	8.7	9.9

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE



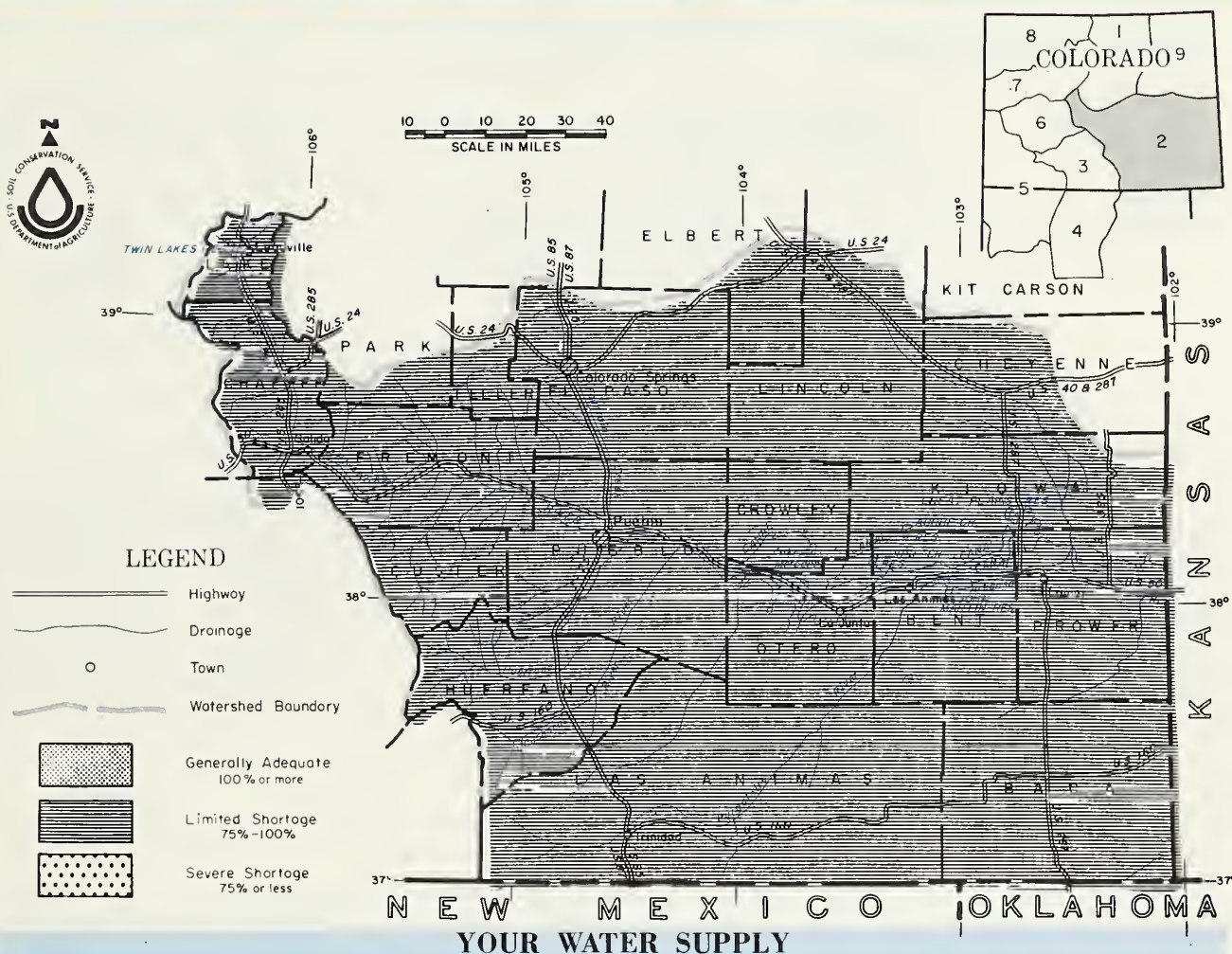
FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of

April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



STREAMFLOW FORECASTS HAVE BEEN REDUCED SHARPLY THIS MONTH. THE SNOWPACK HAS DECREASED MORE RAPIDLY THAN USUAL BECAUSE OF WARM TEMPERATURES AND BELOW NORMAL SNOWFALL. RESERVOIR STORAGE IS ABOUT 70 PERCENT OF AVERAGE EXCLUDING TURQUOISE RESERVOIR WHICH HAS 59,000 A.F. COMPARED TO 52,400 A.F. LAST YEAR. WATER SUPPLIES WILL BE BELOW NORMAL UNLESS ABOVE AVERAGE PRECIPITATION IS RECEIVED DURING THE REMAINDER OF THE SEASON.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. O. BURDICK—STATE CONSERVATIONIST
W. O. MCCORKLE—AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO LA JUNTA, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average +
Arkansas nr Pueblo (1)	240	81	298
Arkansas at Salida (1)	260	84	309
Cucharas nr LaVeta	10	83	12
Purgatoire at Trinidad	30	65	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa	Avg.	Poor
Fountain Creek	Avg.	Poor
Grape	Avg.	Poor
Hardscrable Creek	Avg.	Poor
Huerfano	Avg.	Poor
Monument Creek	Avg.	Poor

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Arkansas	10	91	94
Cucharas and Purgatoire	3	117	39

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Arkansas	3	89	88
Cucharas and Purgatoire	1	87	87

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Adobe	61.6	13.3	47.5	11.1
Clear Creek	11.4	5.7	6.0	7.3
Cucharas	40.0	- -	- -	3.3
Great Plains	150.0	44.0	108.6	38.3
Horse Creek	26.9	0.0	9.8	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
John Martin	353.9	25.4	34.6	89.4
Meredith	41.9	7.8	25.6	10.0
Model	15.0	- -	1.3	3.1
Turquoise	130.0	59.0	52.4	7.5
Twin Lakes	57.9	31.4	41.5	19.9

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE



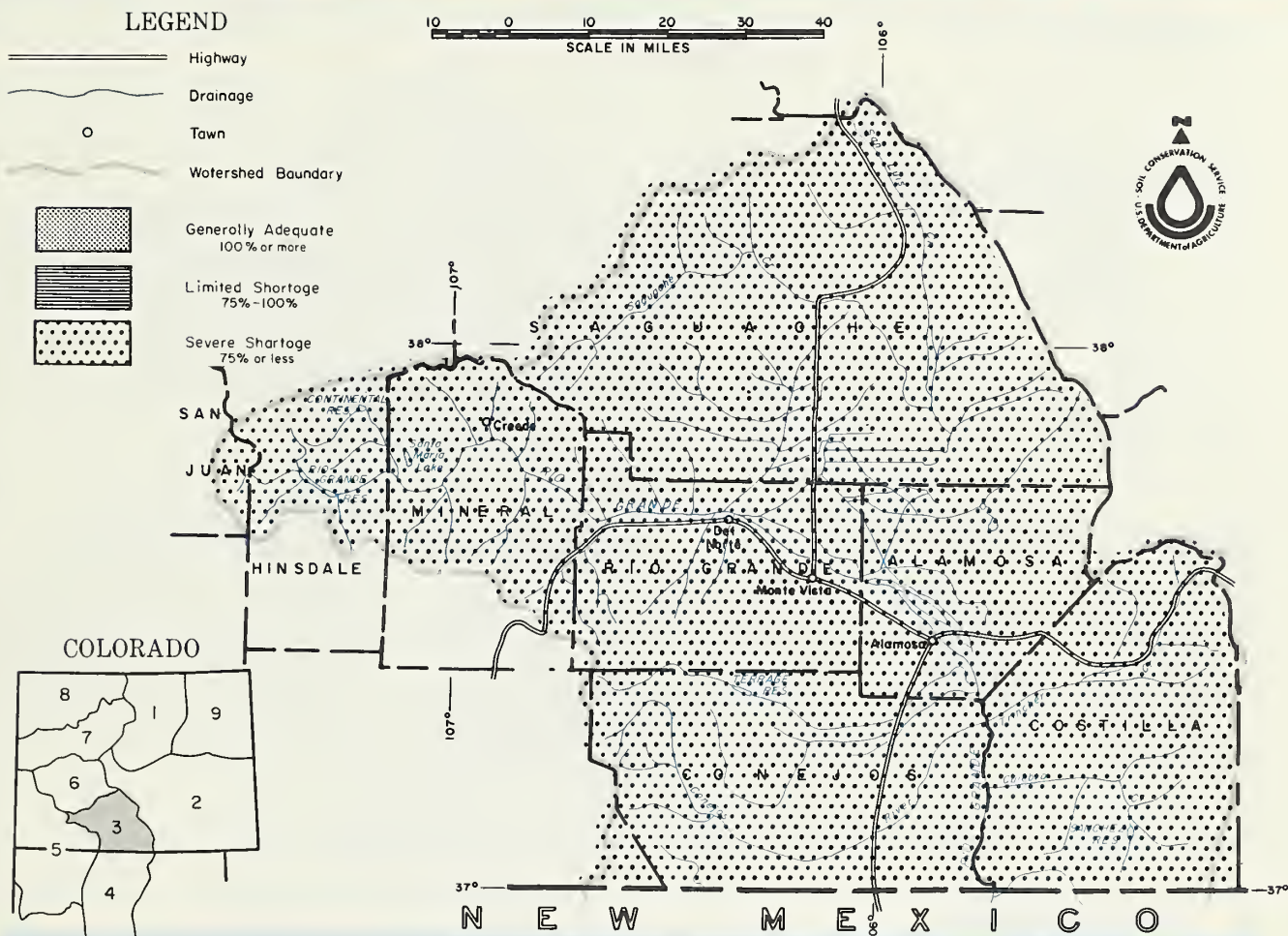
FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS HAVE BEEN DRASTICALLY REDUCED DUE TO WARM TEMPERATURES AND PRACTICALLY NO SNOW. MANY SNOW COURSES HAVE MUCH LESS SNOW THAN MARCH FIRST WHICH IS QUITE UNUSUAL. RESERVOIR STORAGE IS SLIGHTLY ABOVE NORMAL. THIS WILL SUPPLEMENT THE BELOW NORMAL FLOWS. SOILS IN THE IRRIGATED AREA OF THE BASIN ARE DRY. SNOWFALL MUST BE MUCH ABOVE NORMAL DURING APRIL OR SHORTAGES CAN BE EXPECTED.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK—STATE CONSERVATIONIST KENNETH A. PITNEY—AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO DURANGO, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average ⁺
Alamosa abv Terrace	40	65	62
Conejos nr Mogote	120	66	182
Culebra at San Luis (2)	15	79	19
Rio Gr. at 30 Mile Bridge (3)	90	77	117
Rio Gr. nr Del Norte (3)	330	75	438
South Fork at South Fork	77	70	110

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺
Alamosa	2	105	76
Conejos	3	83	43
Culebra	2	135	62
Rio Grande	10	119	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Cr.	Poor	Poor
Trinchera	Poor	Poor

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺
Alamosa	1	112	168
Conejos	1	117	90
Culebra	2	90	87
Rio Grande			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺
Continental	26.7	6.2	10.0	5.1
Platoro	60.0	2.9	2.9	7.1
Rio Grande	45.8	18.1	41.6	13.3

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺
Sanchez	103.2	10.0	18.0	11.1
Santa Maria	45.0	6.6	11.0	6.0
Terrace	17.7	6.3	0.0	4.0

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE



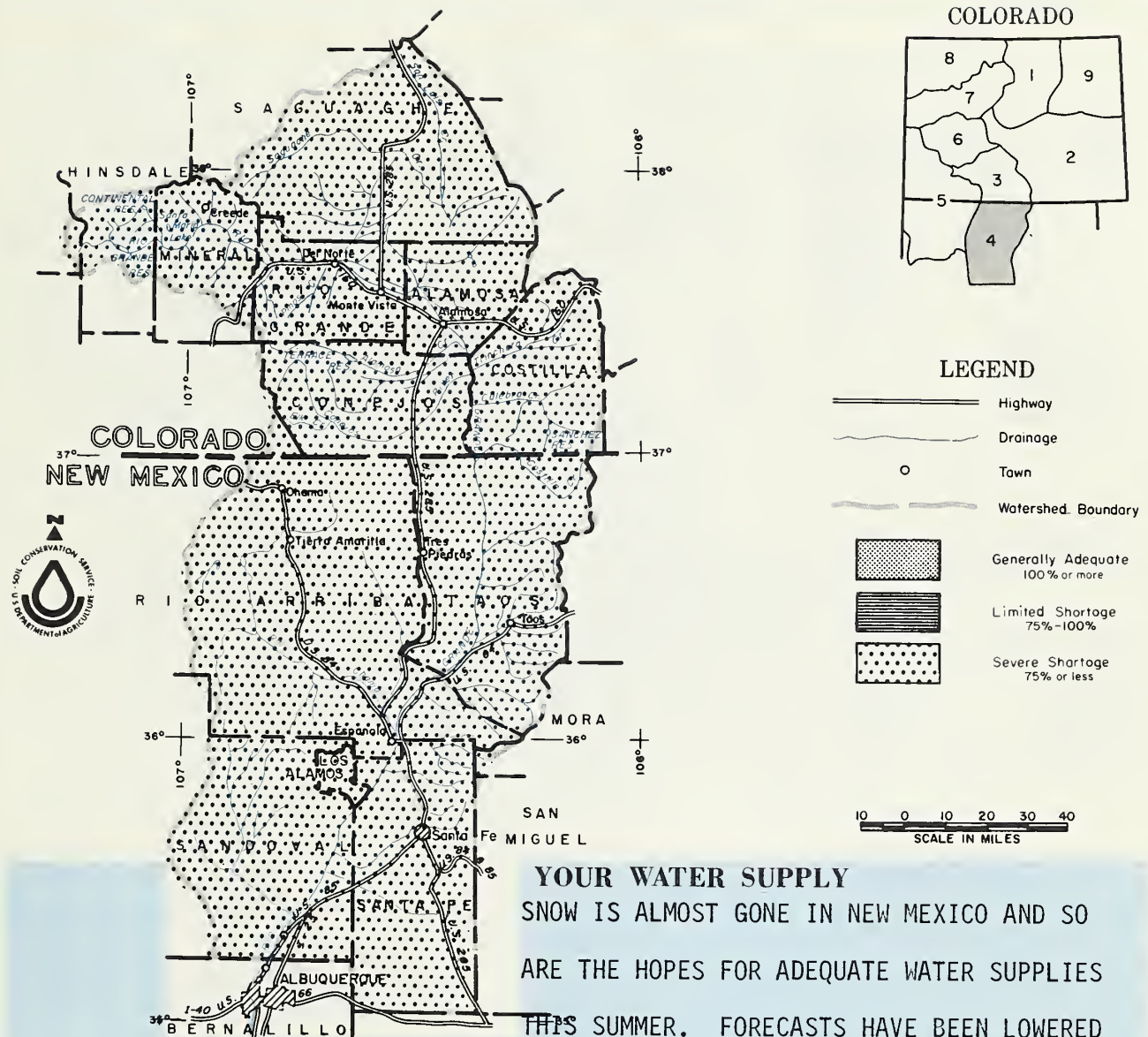
FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

KENNETH L. WILLIAMS—STATE CONSERVATIONIST
JOHN WERNER—AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO
SANTA FE, NEW MEXICO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Ju

FORECAST POINT	FORECAST	% of Average	Average ⁺
Costilla at Cost. (1)	10	56	18
Pecos at Pecos	25	61	41
Rio Chama at El Vado	125	67	188
Rio Gr. at Otowi (2)	360	70	513
Rio Gr. at San Mar (2)	200	60	334
Rio Hondo nr Valdez	10	67	15
Red R. at mouth nr Questa	20	63	32

The forecast of the Rio Grande at San Marcial is 31% of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺
Pecos	1	0	0
Rio Chama	4	113	33
Rio Grande, N.M.	12	141	30
Rio Hondo	1	440	--
Red River	2	147	28

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Poor	Poor
Jemez River	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliente	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Sante Fe Creek	Poor	Poor

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺
Pecos	2	113	139
Rio Chama	2	146	131
Rio Grande	4	167	137
Red River	1	107	84

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺
Alamogordo	111	45	60	64
Caballo	344	35	43	65
Conchas	273	78	153	161
Elephant Butte	2195	204	317	334

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺
El Vado	195	2	1	6
McMillen-Avalon	32	9	15	22

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE



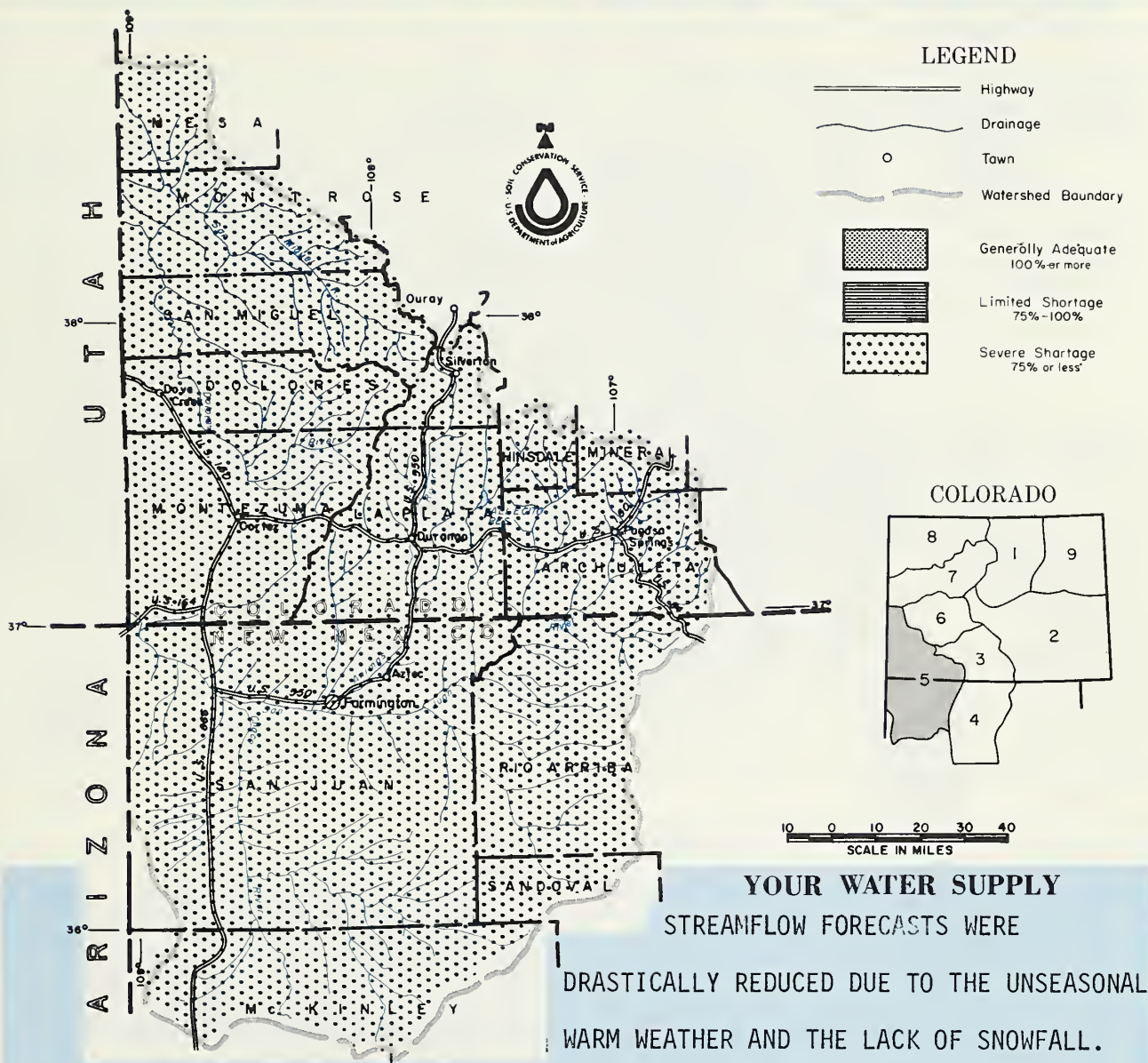
FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

April^{1st} of 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



SOME SNOW COURSES INDICATE A NEAR RECORD LOW PACK. MOUNTAIN AND VALLEY SOILS ARE DRY. CARRY-OVER STORAGE IS SLIGHTLY BETTER THAN AVERAGE. CONSIDERABLY MORE SNOW IS NEEDED TO PROVIDE ENOUGH WATER FOR NORMAL CROP PRODUCTION.

This report prepared by

JACK N. WASHICHEK and RONALO E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

JIM O. BOROICK—STATE CONSERVATIONIST
DENVER, COLORADO
KENNETH L. WILLIAMS—STATE CONSERVATIONIST
ALBUQUERQUE, NEW MEXICO
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
KENNETH A. PITNEY—AREA CONSERVATIONIST
DURANGO, COLORADO
JOHN WERNER—AREA CONSERVATIONIST
SANTA FE, NEW MEXICO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

Apr-Sept

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average ⁺
Animas at Durangc	300	73	409
Dolores at Dolores	150	65	231
La Plata at Hesperus	16	67	24
Los Pinos at Bayfield (1)	136	70	194
Piedra Cr. at Piedra	105	64	163
San Juan at Carracas	250	66	379
Inflow to Navajo Res. (1) (Apr-Jul)	390	63	619

(1) Observed flow plus change in storage in Vallecito Reservoir.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida	Avg.	Poor
Mancos	Avg.	Poor
San Miguel	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺
Animas	1	83	77
Dolores	4	70	54
San Juan	5	100	58

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺
Animas	3	87	82
Dolores	2	96	97
San Juan	1	83	77

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺
Groundhog	22	10	14	7
Lemon	40	22	27	15
Navajo	1696	838	834	--
Vallecito	126	60	81	50

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

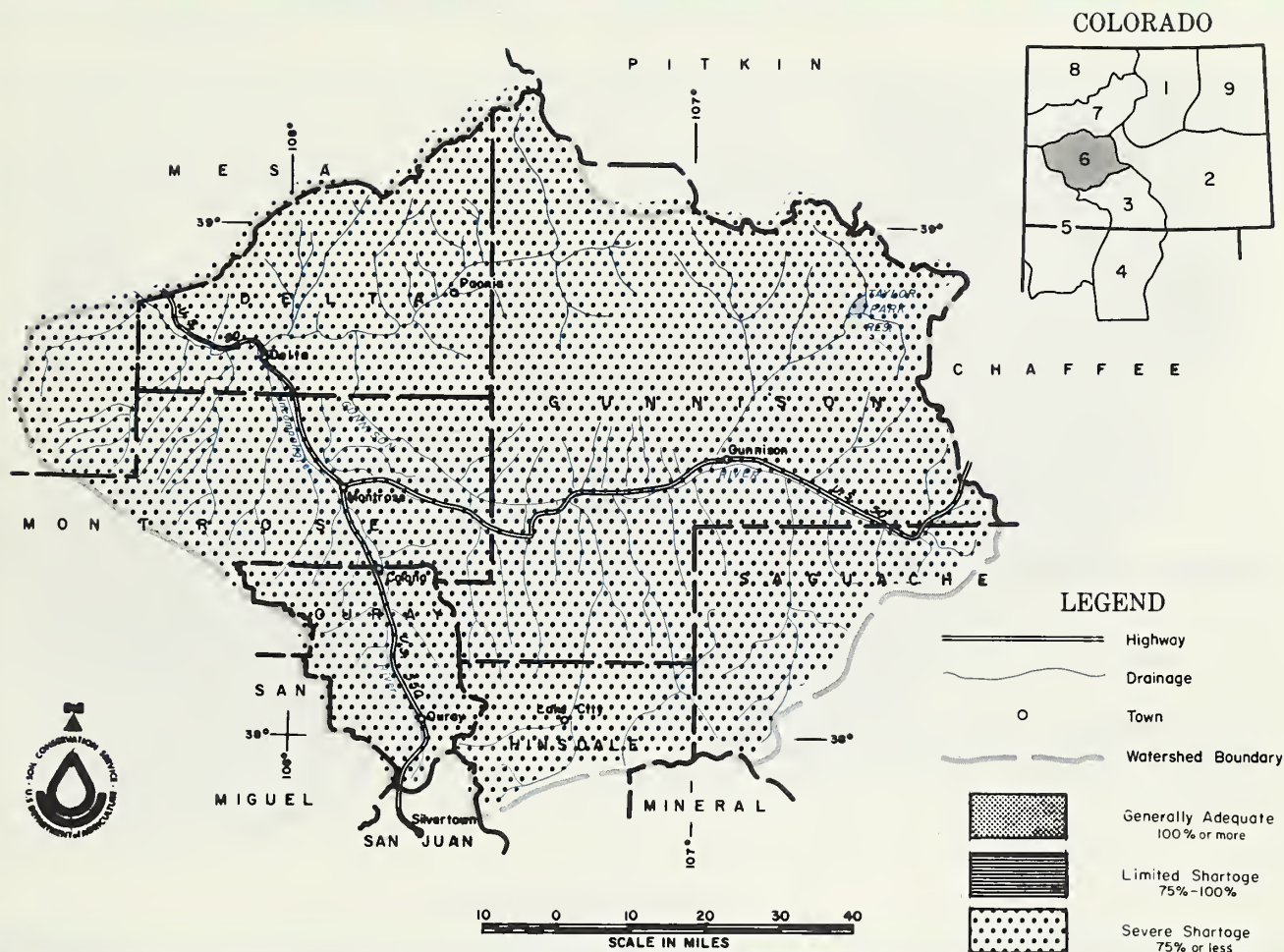


FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS HAVE BEEN SHARPLY REDUCED FROM LAST MONTH ON ALL STREAMS IN THE GUNNISON BASIN. FORECAST NOW RANGE FROM 70 TO 80 PERCENT OF THE 1953-67 AVERAGE. BELOW AVERAGE SNOWFALL AND WARM TEMPERATURES COMBINED TO REDUCE THE SNOWPACK CONSIDERABLY. RESERVOIR STORAGE IN BLUE MESA AND MORROW POINT IS SLIGHTLY ABOVE LAST YEAR. WATER SUPPLIES WILL BE LIMITED UNLESS ABOVE AVERAGE PRECIPITATION OCCURS DURING THE REMAINDER OF THE SEASON.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BURDICK—STATE CONSERVATIONIST
R. L. PORTER—AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average +
Gunnison Inflow to Blue Mesa	575	75	767
Gunnison nr Grand Junction	800	70	1137
Surface Cr. nr Cedaridge	13	81	16
Uncompahgre at Colona	90	70	129

STREAM or AREA	Flow Period	
	Spring Season	Late Season
North Fork of Gunnison Taylor	Avg. Avg.	Fair Fair

(1) Observed flow plus change in storage in Taylor, Blue Mesa and Morrow Point Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Gunnison	12	87	84
Surface Creek	3	80	80
Uncompahgre	3	78	68

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Gunnison	1	124	111
Surface Creek	1	74	103
Uncompahgre	1	74	103

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Blue Mesa	830	321	306	--
Morrow Point	121	116	115	--
Taylor	106	70	92	58

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$ 300

POSTAGE AND FEES PAID
U S DEPARTMENT OF
AGRICULTURE





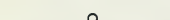



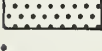
FIRST CLASS MAIL

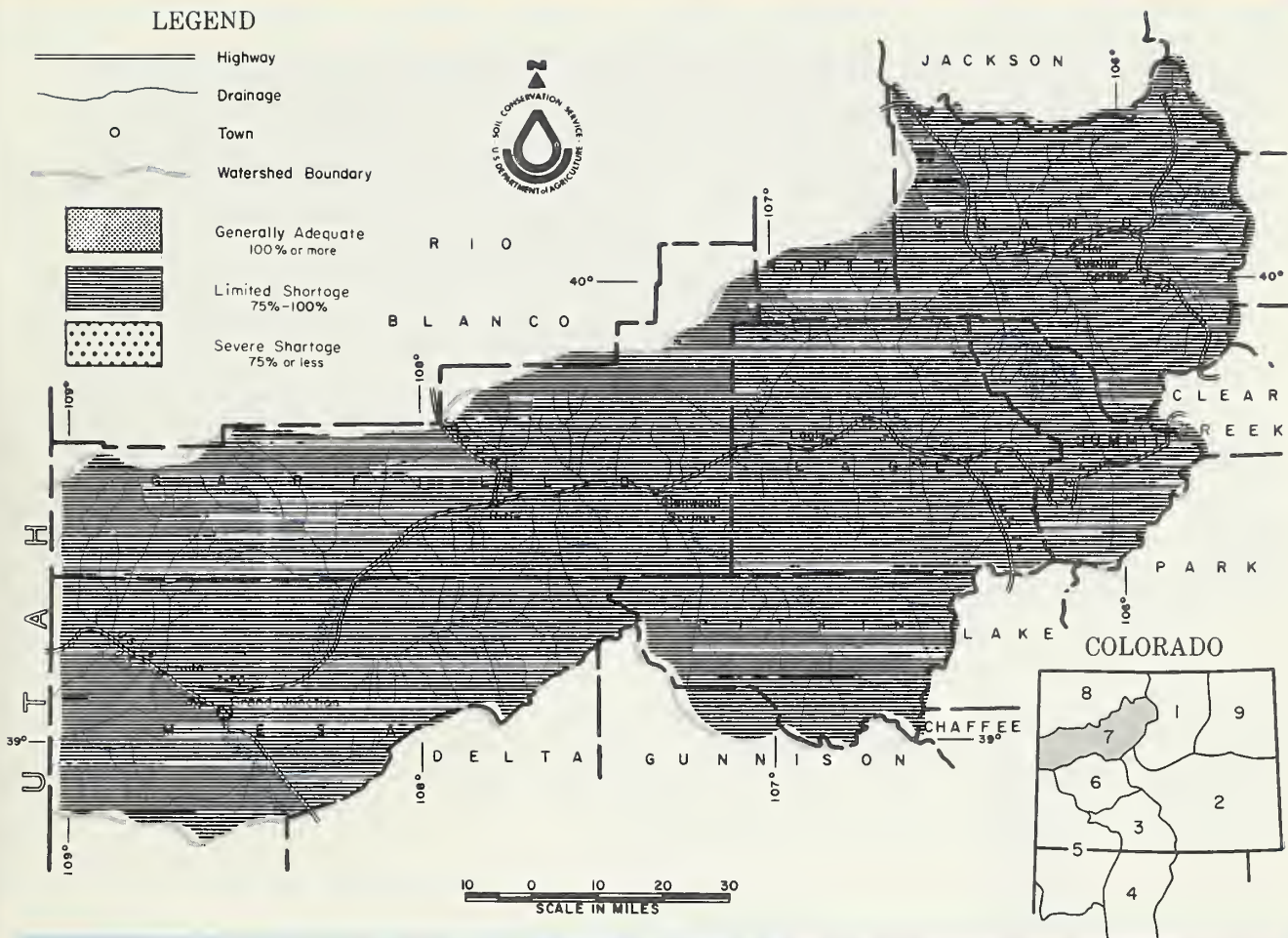
WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

-  Highway
-  Drainage
-  Town
-  Watershed Boundary
-  Generally Adequate
100% or more
-  Limited Shortage
75%-100%
-  Severe Shortage
75% or less



YOUR WATER SUPPLY

WATER SUPPLY FORECASTS DROPPED SHARPLY THIS MONTH. THIS WAS THE DIRECT RESULT OF PRACTICALLY NO INCREASE IN THE SNOWPACK DURING MARCH. THE ONLY TWO BASINS THAT HAVE ABOVE NORMAL SNOW ARE THE BLUE RIVER AND COLORADO MAINSTEM. THESE BASINS ARE JUST SLIGHTLY ABOVE NORMAL. RESERVOIR STORAGE IS GOOD AND WILL PROVIDE AN EXCELLENT SUPPLEMENT TO SUMMER FLOWS. CONSIDERABLY MORE SNOW IS NEEDED TO INSURE ADEQUATE WATER THIS SUMMER.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. O. BURDICK
STATE CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO

R. L. PORTER
AREA CONSERVATIONIST
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average +
Blue ab Green Mt. (1)	225	95	236
Colo. Rv. inflow to Granby Res. (2)	205	94	219
Colo. Rv. nr Dotsero (3)	1300	95	1375
Roaring Fork at Glenwood Springs (4)	600	87	692
Wm. Fk nr Par. (5)	55	92	60
Will. Cr. inflow to Will. Cr. Res	40	87	46
Colo. nr Cameo (6)	2000	90	2216

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Fair	Avg.
Eagle River	Fair	Avg.
Gypsum Creek	Fair	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Blue River	8	83	102
Colorado	21	78	103
Plateau	3	81	83
Roaring Fork	7	71	85
Williams Fork	2	77	96
Willow	2	79	92

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Blue River	1	84	108
Colorado	3	81	118
Roaring Fork	1	69	89
Willow	1	83	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Dillon	254	236	246	233
Granby	466	316	351	233
Green Mountain	147	63	55	63
Homestake	43	6	15	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Ruedi	101	62	61	--
Williams Fork	97	52	45	27
Willow Creek	9	8	8	6
Vega	32	16	18	11

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE



FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS ARE MUCH LOWER THIS MONTH THAN LAST MONTH. FORECASTS FOR THE APRIL-SEPTEMBER PERIOD RANGE FROM 80 TO 100 PERCENT OF THE 1953-67 AVERAGE. WARM TEMPERATURES, HIGH WINDS AND LOW SNOWFALL HAS STARTED MELTING THE SNOWPACK EARLIER THAN USUAL. THE SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AREAS ARE ABOVE AVERAGE.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. O. BURDICK---STATE CONSERVATIONIST
R. L. PORTER---AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average +
Elk at Clark	185	97	191
Laramie at Glendevey	56	92	61
Little Snake at Lily	277	100	277
No. Platte at Northgate	190	88	215
White nr Meeker	235	80	293
Yampa nr Maybell	800	94	853
Yampa at Steamboat Springs	240	92	260

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Avg.	Avg.
Hunt Creek	Avg.	Fair
Illinois River	Avg.	Avg.
Michigan River	Avg.	Avg.
Oak Creek	Avg.	Fair
Trout Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Elk	3	80	95
Laramie	3	74	97
North Platte	5	69	94
White	2	65	80
Yampa	6	74	97

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Laramie	1	83	122
North Platte	2	100	131
Yampa	1	100	114

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

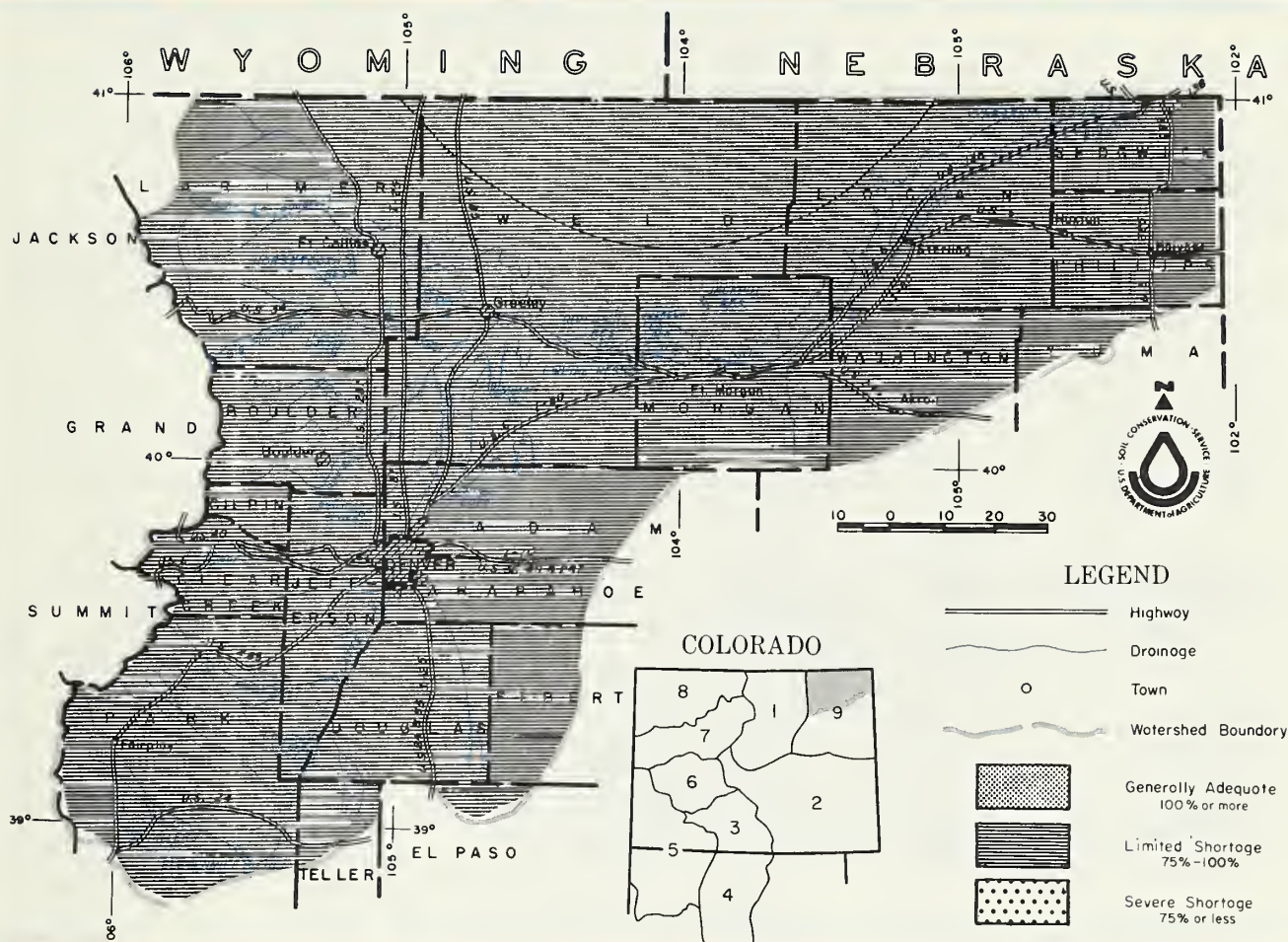


FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE REDUCED AS MUCH AS TWENTY PERCENT ON THE SOUTH PLATTE STREAMS. THIS WAS DUE TO A CONTINUED LACK OF SNOWFALL AND ABOVE SEASONAL TEMPERATURES. IF APRIL SNOWFALL IS AT LEAST AVERAGE, WATER SUPPLIES SHOULD STILL BE ADEQUATE. CARRY-OVER STORAGE IS 122 PERCENT OF NORMAL AND WILL PROVIDE AN EXCELLENT SUPPLEMENT. SOILS ALONG THE PLATTE ARE GENERALLY DRY. SMALLER STREAMS IN THE AREAS SHOULD HAVE FAIRLY GOOD EARLY FLOWS.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. O. BUROICK --- STATE CONSERVATIONIST
O. W. GILLASPIE --- AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
STERLING, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

Apr-Sept

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average ⁺
Big Thompson at Drake (1)	90	90	100
Boulder at Orodell	45	92	49
Cache La Poudre at Canyon Mouth (2)	195	91	215
Clear Cr. at Golden (3)	105	88	119
Saint Vrain at Lyons (4)	60	86	70

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Avg.	Avg.
South Platte from Fort Morgan to Sterling	Avg.	Avg.
South Platte below Sterling	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Cumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺
Big Thompson	5	81	97
Boulder	3	96	97
Cache La Poudre	6	73	96
Clear Creek	6	78	86
Saint Vrain	3	89	92
South Platte	3	117	113

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺
Big Thompson	-	- -	- -
Boulder	-	- -	- -
Cache La Poudre	-	- -	- -
Clear Creek	2	93	121
Saint Vrain	-	- -	- -
South Platte	2	114	130

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺
Carter	108.9	107.5	106.4	81.7
Cheesman	79.0	79.0	73.5	49.0
Eleven Mile	97.8	78.0	96.4	72.1
Empire	37.7	32.8	32.8	29.6
Horsetooth	143.5	22.9	116.5	106.8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺
Jackson	35.4	34.2	33.2	34.0
Julesburg	28.2	22.7	19.8	21.5
Prewitt	32.8	27.5	27.7	16.8
Point of Rocks	70.0	69.5	69.2	58.4
Riverside	57.5	59.0	61.9	49.6

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE



FIRST CLASS MAIL

APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1972

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/30	46	15.2	20.7	16.3
McIntyre	3/28	31	11.1	13.4	10.5
Roach	3/28	54	17.3	24.8	18.2
North Platte River					
Cameron Pass	3/27	69	28.4	38.6	26.5
Columbine Lodge	3/29	60	24.2	31.2	23.5
Northgate	3/27	8	2.5	7.9	6.2
Park View	3/28	25	7.2	11.8	8.6
Willow Cr. Pass(B)	3/28	33	10.5	15.4	12.5
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/29	15	5.2	7.1	5.9
Boulder Falls	3/29	43	14.3	14.2	13.3
University Camp	3/29	58	19.3	19.1	20.7
Big Thompson River					
Deer Ridge	4/2	6	1.3	4.7	5.0
Hidden Valley	4/3	30	9.0	10.6	11.0
Lake Irene (B)	3/26	56	20.2	27.3	20.7
Long's Peak	3/31	41	12.3	13.2	10.7
Two Mile	4/2	58	17.3	18.7	14.5
Cache La Poudre					
Bennett Creek	3/28	23	4.7	8.9	-
Big South	3/29	1	0.2	0.5	2.4
Cameron Pass	3/27	69	28.4	38.6	26.5
Chambers Lake	3/29	19	7.4	12.1	9.1
Deadman Hill	3/30	46	15.2	20.7	16.3
Hour Glass Lake	3/28	22	6.1	7.7	6.8
Joe Wright	3/27	65	22.4	29.3	-
Lost Lake	3/29	32	12.6	16.0	11.5
Pine Creek	3/30	6	0.3	0.7	1.9
Red Feather	3/30	20	4.9	7.9	7.2
Clear Creek					
Baltimore (B)	3/29	15	5.2	7.1	5.9
Berthoud Falls	3/29	42	13.7	16.3	12.9
Empire	3/29	19	6.3	8.5	7.5
Grizzly Peak (B)	3/29	58	18.4	23.9	17.9
Loveland Lift	3/30	44	11.6	16.5	23.4
Loveland Pass	3/30	49	16.2	19.0	15.4
Saint Vrain River					
Copeland Lake	4/2	10	3.2	5.5	4.4
Ward	3/30	19	4.6	6.6	6.7
Wild Basin	4/2	40	13.3	11.7	11.8
South Platte River					
Como	3/29	29	7.4	6.5	-
Geneva Park	3/29	19	4.8	2.7	3.5
Horseshoe Mt.	3/28	51	13.7	11.5	-
Hoosier Pass	3/30	48	14.3	11.6	12.9
Jefferson Creek	3/29	35	10.2	10.3	9.2
Mosquito	3/29	35	10.2	8.7	-
Trout Creek Pass	3/28	19	4.3	2.2	-
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/29	19	2.3	7.3	5.8
Cooper Hill (B)	4/1	48	11.9	12.2	10.6
East Fork	3/30	29	8.9	10.3	9.6
Four Mile Park	3/30	15	3.6	4.7	4.4
Fremont Pass	3/30	54	15.8	19.4	16.1
Garfield	3/29	41	12.6	12.4	13.2
Hermit Lake	3/30	15	2.4	5.4	-
Monarch Pass	3/29	50	16.0	16.3	17.3
Tennessee Pass	3/30	41	10.6	10.0	10.1
Twin Lakes Tunnel	3/30	41	12.6	10.3	10.7
Westcliffe	3/30	14	2.8	3.3	5.4

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
<u>Cucharas River</u>					
Blue Lakes	3/31	7	0.6	0.0	2.9
Cucharas Pass	3/31	7	1.2	3.9	-
LaVeta Pass (B)	3/31	10	2.6	2.4	7.3
<u>Purgatorie River</u>					
Bourbon	3/30	14	3.4	3.4	7.1
RIO GRANDE BASIN-COLO.					
<u>Alamosa River</u>					
Silver Lakes	3/29	1	0.1	0.0	5.5
Summitville	3/28	61	17.8	17.0	18.1
<u>Conejos River</u>					
Cumbres	3/30	22	8.0	10.3	18.6
LaManga	3/30	35	11.9	-	-
Platoro	3/30	27	9.0	8.5	16.6
River Springs	3/31	0	0.0	1.6	4.8
<u>Culebra River</u>					
Brown Cabin	3/29	6	1.5	0.0	-
Cottonwood (B)	NS			4.8	-
Culebra	3/30	25	7.1	4.8	8.4
LaVeta Pass (B)	3/31	10	2.6	2.4	7.3
Trinchera (B)	3/29	24	7.6	-	-
<u>Rio Grande</u>					
Cochetopa Pass	3/28	28	6.3	6.0	5.1
Grayback	3/31	32	10.1	11.4	-
Hiway	3/29	56	18.6	17.9	26.0
Lake Humphrey	3/28	14	3.7	3.2	5.5
Love Lake	3/30	24	8.0	3.3	-
Pass Creek	3/29	14	4.4	3.9	11.1
Pool Table	3/30	21	5.4	1.7	5.9
Porcupine	3/31	37	11.0	6.4	10.1
Santa Maria	3/30	2	0.3	0.5	3.7
Upper Rio Grande	3/31	19	6.0	4.2	6.8
Wolf Creek Pass	3/29	43	16.5	15.7	27.0
Wolf Cr. Sum. (B)	3/29	69	24.7	21.6	28.3
RIO GRANDE BASIN-N.M.					
<u>Pecos River</u>					
Panchuela	3/29	0	0.0	0.0	1.3
<u>Rio Chama</u>					
Bateman	3/29	22	6.7	6.4	11.4
Capulin Peak	3/29	0	0.0	0.0	4.0
Chama Divide	3/29	0	0.0	0.0	1.4
Chamita	3/29	4	1.3	0.7	7.5
<u>Rio Grande</u>					
Aspen Grove	3/29	3	1.1	0.5	3.7
Big Tesuque	3/30	0	0.0	0.0	4.2
Blue Bird Mesa	3/28	1	0.1	0.0	3.6
Cordova	3/30	24	6.4	5.1	10.0
Elk Cabin	3/30	0	0.0	0.0	2.1
Fenton Hill	3/30	1	0.2	0.0	2.7
Hopewell	3/29	22	7.8	-	-
Pajarito Peak	3/30	0	0.0	0.0	0.3
Payrole	3/31	4	1.5	1.2	6.2
Quemazon	3/30	15	5.2	2.8	8.2
Rio En Medio	3/30	4	1.5	2.8	7.7
Sandoval	3/30	0	0.0	0.0	4.5
Taos Canyon	3/29	6	1.1	0.0	3.5
Tres Ritos	3/29	3	0.5	0.0	4.2
<u>Rio Hondo</u>					
Twinning	3/31	16	4.4	1.0	-
<u>Red River</u>					
Hematite Park (B)	3/30	4	0.6	0.0	3.5
Red River	3/30	7	1.9	1.7	5.5

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1972

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 53 67
SAN JUAN-DOLORES BASIN					
<u>Animas River</u>					
Cascade	4/3	9	3.6	4.2	10.8
Lemon	3/31	0	0.0	1.0	-
Mineral Creek	4/3	31	11.5	12.5	13.3
Molas Lake	4/3	13	4.5	9.7	12.6
Purgatory	4/3	43	16.7	12.0	-
Red Mt. Pass (B)	4/3	79	29.5	29.1	30.1
Silverton Sub-Sta.	4/3	0	0.0	2.4	5.1
Spud Mountain	4/3	42	17.4	16.4	23.1
<u>Dolores River</u>					
Lizzard Head	3/30	32	12.4	13.2	16.0
Lone Cone	3/29	31	10.7	13.4	-
Rico	3/30	0	0.0	0.0	5.4
Telluride	3/30	7	1.6	5.6	5.7
Trout Lake	3/30	22	7.7	12.4	13.2
<u>San Juan River</u>					
Chama Divide (B)	3/29	0	0.0	0.0	1.4
Chamita (B)	3/29	4	1.3	0.7	7.5
Upper San Juan	3/29	36	12.6	17.5	30.8
Wolf Cr. Pass (B)	3/29	43	16.5	15.7	27.0
Wolf Cr. Summit	3/29	69	24.7	21.6	28.3
GUNNISON BASIN					
<u>Gunnison River</u>					
Alexander Lake	3/30	50	18.7	21.3	21.4
Blue Mesa	3/30	13	3.2	5.1	7.9
Butte	3/30	43	13.4	14.7	-
Cochetopa Pass (B)	3/28	28	6.3	6.0	5.1
Crested Butte	3/30	30	11.2	9.7	13.3
Keystone	3/29	47	17.9	20.4	19.7
Lake City	3/28	26	7.2	7.2	7.7
Mesa Lakes (B)	3/28	38	11.6	17.5	17.5
McClure Pass	3/29	28	10.0	15.3	14.6
Park Cone	3/29	38	10.4	9.1	10.9
Park Reservoir	3/30	57	19.8	23.6	23.6
Porphry Creek	3/29	50	14.4	16.6	16.9
Tomichi	3/29	38	12.7	12.9	12.2
<u>Surface Creek</u>					
Alexander Lake	3/30	50	18.7	21.3	21.4
Mesa Lakes (B)	3/28	38	11.6	17.5	17.5
Park Reservoir	3/30	57	19.8	23.6	23.6
<u>Uncompahgre River</u>					
Ironton Park	3/29	20	5.3	11.7	17.9
Red Mountain Pass	4/3	79	29.5	29.1	30.1
Telluride (B)	3/30	7	1.6	5.6	5.7
COLORADO BASIN					
<u>Blue River</u>					
Blue River	3/30	32	8.7	8.6	8.5
Fremont Pass	3/30	54	15.8	19.4	16.1
Frisco	3/29	24	6.8	8.8	7.5
Grizzly Peak	3/29	58	18.4	23.9	17.9
Hoosier Pass (B)	3/30	48	14.3	11.6	12.9
Shrine Pass	3/29	60	18.8	23.6	17.4
Snake River	3/29	19	5.4	10.9	7.6
Summit Ranch	3/29	28	8.4	9.3	7.1

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 53 67
<u>Colorado River</u>					
Arrow	3/30	41	14.5	18.7	11.8
Berthoud Pass	3/31	54	19.3	21.6	14.5
Berthoud Summit	3/29	60	19.0	21.4	19.3
Cooper Hill	4/1	48	11.9	12.2	10.6
Fiddler Gulch	3/30	50	12.4	15.0	15.1
Glenmar Ranch	3/28	24	7.5	10.3	7.9
Gore Pass	3/29	33	10.3	12.5	10.0
Grand Lake	3/26	26	8.0	9.3	8.2
Lake Irene	3/26	56	20.2	27.3	20.7
Lapland	3/28	36	12.4	15.9	9.9
Lulu	3/28	59	19.5	25.9	17.0
Lynx Pass	3/29	37	11.8	16.2	12.0
McKenzie Gulch	3/29	17	4.8	5.7	-
Middle Fork	3/28	30	8.8	13.0	9.1
Milner	3/26	35	12.1	17.4	13.3
North Inlet	3/26	27	7.4	10.3	8.7
Pando	3/30	29	10.2	11.3	10.4
Phantom Valley	3/26	20	7.3	13.9	10.4
Ranch Creek	3/30	34	10.2	14.5	9.4
Tennessee Pass(B)	3/30	41	10.6	10.0	10.1
Vail Pass	3/29	49	17.3	22.5	17.1
Vasquez	3/31	50	15.1	18.3	12.4
<u>Roaring Fork River</u>					
Aspen	3/28	51	16.7	24.9	16.4
Chapman	3/29	52	17.2	18.1	-
Independence Pass	3/30	50	15.1	20.2	17.7
Ivanhoe	3/30	58	18.9	23.0	17.9
Kiln	3/30	48	14.5	15.2	-
Last Chance	3/30	43	13.5	13.3	-
Lift	3/28	49	14.4	20.7	19.0
McClure Pass	3/29	28	10.0	15.3	14.6
Nast	3/30	17	4.9	7.8	5.3
North Lost Trail	3/29	28	9.7	15.2	14.1
<u>Williams Fork River</u>					
Glenmar Ranch	3/28	24	7.5	10.3	7.9
Jones Pass	3/28	47	15.3	22.3	-
Middle Fork	3/28	30	8.8	13.0	9.1
<u>Willow Creek</u>					
Granby	3/28	26	7.8	7.7	7.5
Willow Cr. Pass	3/28	33	10.5	15.4	12.5
<u>Plateau Creek</u>					
Mesa Lakes	3/28	38	11.6	17.5	17.5
Park Reservoir	3/30	57	19.8	23.6	23.6
Trickle Divide	3/30	64	23.5	27.0	25.2
YAMPA BASIN					
<u>Elk River</u>					
Clark	3/30	26	9.1	9.0	10.0
Elk River	3/30	46	16.3	22.7	16.8
Hahn's Peak	3/30	34	12.3	15.7	12.9
<u>White River</u>					
Burro Mountain	3/30	37	12.7	22.6	17.0
Rio Blanco	3/29	38	13.5	17.5	15.8
<u>Yampa River</u>					
Bear River	3/27	37	10.4	13.4	11.1
Columbine (B)	3/29	60	24.2	31.2	23.5
Dry Lake	3/28	55	19.0	22.4	19.9
Lynx Pass (B)	3/29	37	11.8	16.2	12.0
Rabbit Ears	3/30	76	25.4	35.7	25.7
Yampa View	3/30	36	12.0	19.8	14.3

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
<u>North Platte River</u>					
Muddy Pass	3/30/72	11.1	8.9	7.3	6.4
Willow Pass	3/28/72	9.5	7.7	9.3	6.3
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Alpine Camp	NS	6.9	- -	4.1	3.4
<u>Big Thompson River</u>					
Beaver Dam	NS	7.1	- -	4.1	3.3
Guard Station	NS	6.9	- -	- -	3.6
Two Mile	NS	4.9	- -	4.7	2.6
<u>Clear Creek</u>					
Clear Creek	3/30/72	9.5	6.5	6.6	5.0
Hoop Creek	3/30/72	4.9	2.7	3.3	2.6
<u>Cache La Poudre River</u>					
Feather	NS	10.1	- -	5.3	4.0
Laramie Road	NS	12.4	- -	7.9	6.8
<u>South Platte River</u>					
Hoosier Pass	3/30/72	7.8	4.8	4.3	4.3
Kenosha Pass	3/29/72	4.4	3.4	2.9	2.0
ARKANSAS BASIN					
<u>Arkansas River</u>					
Garfield	3/29/72	6.7	3.9	4.6	3.5
Leadville	3/30/72	7.8	3.1	3.2	3.7
Twin Lakes Tunnel	3/30/72	4.5	1.5	1.8	2.5
RIO GRANDE BASIN - COLORADO					
<u>Conejos River</u>					
Mogote	3/31/72	10.7	5.4	4.6	6.0
<u>Rio Grande</u>					
Bristol View	3/30/72	6.1	5.7	5.1	3.4
LaVeta Pass	3/31/72	11.9	7.6	8.7	8.7
RIO GRANDE BASIN - NEW MEXICO					
<u>Rio Chama</u>					
Bateman	3/29/72	6.7	4.4	1.9	3.2
Chamita	3/29/72	8.0	5.2	4.7	4.1
<u>Rio Grande</u>					
Aqua Piedra	3/29/72	7.2	4.8	3.9	3.7
Big Tesuque	3/31/72	3.7	2.6	0.9	1.9
Rio En Medio	3/31/72	3.5	2.4	0.4	1.2
Taos Canyon	3/29/72	3.3	2.7	2.3	2.3
<u>Red River</u>					
Red Summit	3/30/72	4.9	1.6	1.5	1.9

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
<u>Animas River</u>					
Cascade	4/3/72	9.1	5.3	6.4	6.9
Mineral Creek	4/3/72	5.7	3.1	4.1	3.5
Molas Lake	4/3/72	9.4	3.7	3.4	4.4
<u>Dolores River</u>					
Dolores	NS	19.6	- -	8.4	8.0
Lizzard Head	3/30/72	11.8	4.4	5.0	7.1
Rico	3/30/72	13.8	10.5	10.5	8.3
GUNNISON BASIN					
<u>Gunnison River</u>					
King	3/29/72	3.3	2.1	1.7	1.9
COLORADO BASIN (Mainstem)					
<u>Blue River</u>					
Blue River	3/30/72	4.2	2.6	3.1	2.4
<u>Colorado River</u>					
Berthoud Pass	3/29/72	3.9	2.5	3.1	2.5
Gore	3/29/72	4.9	3.1	3.5	2.6
Grand Mesa	3/30/72	12.5	9.3	12.5	9.0
Ranch Creek	3/30/72	8.7	5.0	5.9	5.3
Vail	3/29/72	12.3	9.0	10.5	6.5
<u>Roaring Fork River</u>					
Placita	3/28/72	9.3	5.8	8.4	6.5
YAMPA BASIN					
<u>Yampa River</u>					
Hahn's Peak	3/30/72	13.1	13.0	13.0	11.4

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service
Soil Conservation Service

Department of Interior

Bureau of Reclamation
Geological Survey
National Park Service
Indian Service

Department of Commerce

National Weather Service

War Department

Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver City of Greeley
City of Boulder City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SNOW SURVEY UNIT
P.O. Box 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE



FIRST CLASS MAIL

FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*